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ABSTRACT

Although numerous cross-sectional studies have documented the coping responses of young adolescents of different ages and of both sexes, few studies have tracked the developmental stages of coping within adolescents. A longitudinal study of adolescent coping was conducted in metropolitan Melbourne, Australia. During the 5-year study, 168 students were tracked to document the pattern of general coping behavior of girls and boys at grade levels 7, 9, and 11, and to determine what changes were apparent in their coping responses. Results showed that both boys and girls remained relatively stable in their declared inability to cope between the ages of 12 and 14. Two years later boys reported much the same low level, but girls reported significantly higher levels of an inability to cope by age 16. Of the coping strategies, five (seeking social support, solving the problem, self-blame, keep to self, and tension reduction) remained stable for adolescents between the ages of 12 and 14, but strategies increased significantly in the following two years. The findings highlight the fact that boys and girls develop differently in their patterns of coping with age, and that there are implications for the timing and substance of coping skills development programs taught in the schools. (Contains 30 references.) (RJM)

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Coping with stresses and concerns during adolescence: A longitudinal study.

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Coping with stresses and concerns of adolescents: A longitudinal study

This paper reports on a longitudinal study of adolescent coping in metropolitan Melbourne, Australia. During the five year period, 168 students were tracked to firstly document the patterns of general coping behaviour of girls and boys at grade levels 7, 9 and 11, and secondly to determine what changes were apparent in their coping responses. Young people's coping was assessed using the Adolescent Coping Scale (ACS, Frydenberg & Lewis, 1993a), an 80-item checklist that identifies 17 distinct coping strategies as well as a young person's professed inability to cope. Some interesting changes over time in students' usage of a number of coping strategies were found.

Both boys and girls remain relatively stable in their declared inability to cope between the ages of 12 and 14. However, while boys report much the same low level two years later, girls report significantly higher levels of and inability to cope by the time they are 16.

Of the coping strategies, five (Seeking Social Support, Solving the Problem, Self-Blame, Keep to Self and Tension Reduction) remained stable for adolescents between the ages of 12 and 14 but increased significantly in the next two years. These represent a combination of what may be termed functional and dysfunctional strategies. For two of the five strategies (Self-Blame and Social Support) boys' usage diminished from age 12 to 14 years and then returned to approximately 12 year old level by the time they were 16. In contrast, the girls' usage of these two strategies increased moderately between ages 12 to 14 years but increased dramatically between ages 14 and 16. Of the remaining strategies for which age showed a significant main effect, three strategies (Social Action, Spiritual Support and Physical Recreation), had a similar pattern of decrease in usage between the ages of 12 and 14, after which the usage remained relatively stable. The final strategy which varied with age was Professional Help. Reference to professionals was rated significantly lower 14 than it was in at 12 and 16 for both boys and girls. The findings highlight the fact that boys and girls develop differentially in their patterns of coping with age and there are implications for the timing and substance of coping skills development programs that may be taught in schools.

Coping with stresses and concerns during adolescence: A longitudinal study.

While there have been numerous cross sectional studies which have documented the coping responses of young adolescents of different ages and of both sexes, there have been very few studies which have tracked the development of coping within adolescents over time. This study reports the results of such an investigation. As has been previously documented, numerous stresses operate on young people in schools (Matheney, Aycock & McCarthy, 1993). In addition to school-related problems these stresses include family and other relationship concerns, many of which have remained stable over recent years and are dominated by concerns relating to careers, making grades and friendship issues (Frydenberg & Lewis, 1996). The focus of this paper is how young people cope with these stresses over a five year period between the ages of 12 and 16 and to what extent the manner in which they cope changes over time.

Coping has come to represent the behavioural and cognitive efforts used by individual's to manage the person-environment relationship. The seminal work in this regard was carried out by Richard Lazarus and his colleagues (Folkman & Lazarus, 1985, 1988) but there is now a burgeoning body of research that relates particularly to adolescent coping. Much of this research is cross-sectional. Longitudinal investigations in the area of adolescent coping promise insights which will enable those working with young people to determine the timing and format of interventions that may be appropriate in encouraging optimal development during adolescence.

Gender and coping

In contextualising an investigation into changes in adolescents' coping responses over time, it is important to note that there are differences in both what concerns boys and girls and in how they cope. Girls generally report problems more frequently than do males (Frydenberg & Lewis, 1996; Stark, Spirito, Williams & Guevremont, 1989) and they perceive problems as more extreme, either positive or negative (Newcomb, Huba & Bentler, 1986). When it comes to coping with concerns the overall gender differences are generally consistent across studies (see Frydenberg, 1997 for a summary of studies). Girls are generally more affiliative and use more social support than do boys. For example, Bird and Harris (1990) found that females use more social support and males use more ventilation, while Patterson and McCubbin (1987) found that males use more humour while females are more focused on interpersonal relationships with siblings, parents,

friends and other adults. Copeland and Hess (1995), using Patterson and McCubbin's (1987) A-Cope as the measure of coping, found that females used more proactive orientation and catharsis while the males tended to avoid problems and use physical diversions. The relationship between the use of particualr strategies and outcomes, to date remains relatively unexplored. One study of adolescent boys, however, found that boys who overachieved used social support to a greater extent than did other boys (Parsons, Frydenberg & Poole, 1996).

Age and coping

Age related differences in coping have been reported frequently. There is some evidence that functional coping decreases with age (Compas, Malcarne, & Fondacaro, 1988; Seiffge-Krenke & Shulman, 1990) whilst emotional coping increases with age, for example, older adolescents generally use more tension-reducing strategies than do younger adolescents (Frydenberg & Lewis, 1993b; Compas et al., 1988). In a study of 673 students (12 to 17 yeas), drawn from five secondary schools in metropolitan Melbourne, Australia, age-related responses were evaluated (Frydenberg & Lewis, 1993b). Young people in the early years of post-primary schooling reported using more work-related and less tension reducing strategies than did students at any other level. In contrast, the older students (16 year olds) reported being the least likely to use hard work and the most likely to rely on tension reduction and self-blame.

In general, age-related differences in coping have been based upon cross sectional data and consequently interpretations may be tenuous. Only three longitudinal investigations were uncovered in the relevant literature. It appears that longitudinal data confirms that which has been established in cross-sectional studies. Groër, Thomas and Shoffner (1992) found that girls reported greater stress both in earlier and later years of high school and these stressors were generally related to interpersonal and family relationships. Both boys and girls reported using "active distraction" techniques such as sports and exercise. However, girls reduced their use of this strategy in the senior years of high school but increased the use of "passive distraction" which included behaviours such as reading, listening to music and sleeping.

In a cross-sectional study, Matheney et al., (1993) reported an increase in emotion-focused coping over the school years. In contrast, a study by Ebata and Moos (1994), which tracked young people for a one year period found that older

adolescents used more approach-coping, were more active, appraised the focal stressor as controllable and as a challenge and had more ongoing social resources. The second longitudinal study does not report change in coping over time but rather examines the long-term effects of using social support (Feldman, Fisher, Ransom & Dimiceli, 1995). In this study 169 adolescents were interviewed once at 13 and again five to six years later when they were adults. For boys, turning to religion and to friends during adolescence were each associated with poor young adult adaptation, whereas for girls they were each associated with good adaptation. This led the author to conclude that what is 'good for the goose is not necessarily good for the gander.' That is, the prognostic value of specific adolescent coping behaviours for adult adaptation is not identical for boys and girls. Turning to friends may work differently for boys than for girls. Moreover, social support may be used by boys and girls to manage different problems.

Categorisation of coping

In order to understand how people deal with stress, coping actions have been grouped into broad band categories. For example, Folkman and Lazarus (1988) and Compas et al., (1988) have two categories: problem and emotion-focused coping. The former, comprising of 11 coping actions, is directed at modifying the stress and the latter, aimed at managing or regulating emotion, contains 62 coping actions which have been grouped into seven categories or scales. According to Lazarus, in the coping process there is both a problem-focused aspect and an emotion-focused aspect present in each interaction. This has been demonstrated in a number of studies (Edwards & Kelly, 1980; Fahs, 1986; Folkman & Lazarus, 1980, 1985; Lazarus & Folkman, 1984; Manzi, 1986). Another dichotomous categorisation is provided by Ebata and Moos (1991) who have approach and avoidant coping, that is, whether the response is directed towards or away from the stressor. Similarly Greenglass (1991) talks in terms of two coping styles: palliative and instrumental.

Some researchers have found that the strategies can be best be grouped as three coping styles representing functional and dysfunctional aspects of coping (Cox, Gotts, Boot & Kerr, 1988; Frydenberg & Lewis, 1991; Seiffge-Krenke & Shulman, 1990). The three modes of coping identified by Seiffge-Krenke (1993) include active coping, internal coping and withdrawal. The final of these includes defences such as denial or repression and entails a fatalistic attitude that ultimately leads to withdrawal. While withdrawal can be regarded as a 'purposeful' reaction, it generally means the problem is not solved at a given point of time. The functional styles represent direct attempts to deal with the

dysfunctional styles relate to the use of non-productive strategies (Frydenberg & Lewis, 1993a).

The categorisations are sometimes made according to similarity of ideas or actions or are based on empirically derived groupings through factor analysis. Nevertheless, any categorisation remains a tool of convenience whose limitations in quantifying human endeavour need to be kept in mind.

The 18 strategies identified by the Adolescent Coping Scale (Frydenberg & Lewis, 1993a) are listed below. Each is accompanied by an exemplar or coping action.

Insert Figure 1

Frydenberg and Lewis (1993a) have three categories, reference to others, non-productive coping and productive coping. These broad groupings can be divided into combination of strategies:

1.*Solving the Problem.* Solving the Problem comprises eight coping strategies (Seeking Social Support, Focus on Solving the Problem, Physical Recreation, Seek Relaxing Diversion, Investing in Close Friends, Seek to Belong, Work Hard and Achieve, Focus on the Positive) and represents a style of coping characterised by working at a problem while remaining optimistic, fit, relaxed and socially connected.

2. *Non-productive Coping.* Non-productive coping comprises eight strategies (Worry, Seek to Belong, Wishful Thinking, Not Cope, Ignore the Problem, Tension Reduction, Keep to Self, Self-blame). These primarily reflect a combination of what may be termed non-productive avoidance strategies which are empirically associated with an inability to cope.

3. *Reference to Others.* Reference to Others contains four strategies (Seek Social Support, Seek Spiritual Support, Seek Professional Help, Social Action) and can be characterised by turning to others for support whether they be peers, professionals or deities.

Ebata & Moos (1994) point out the utility in not only employing composite styles but also retaining the narrow-band coping distinctions. The extent to which they use each of the coping behaviours described. Consequently in this investigation

change in both coping styles and strategies will be reported. Strategies are the 18 narrow-band categories of coping while the styles represent three broad-band groupings made up of the strategies.

Method

This paper reports on adolescent concerns and coping assessed in 1991, 1993 and 1995 in six post-primary schools, in metropolitan Melbourne, Australia. During the five year period, 168 students (45% girls and 55% boys) were tracked to firstly document the patterns of coping behaviour of girls and boys at grade levels 7 (12-13 years), 9 (14-15 years) and 11 (16-17 years) and secondly to determine what changes were apparent in their adaptation.

Descriptions of young people's coping have been the basis of the development of the Adolescent Coping Scale (Frydenberg & Lewis, 1993a) which was used in this study. The ACS is an 80-item checklist which provides measurement of 17 distinct coping strategies as well as one scale which captures a young person's professed inability to cope. The 18 scales each reflect a different coping strategy and each contain between 3 and 5 items. Apart from the last item, which asks student to write down any things they do to cope, other than those things described in the preceding 79 items, each item describes a specific coping behaviour. Respondents indicate the extent to which the coping activity described was used (1 "doesn't apply or don't do it", 2 "used very little", 3 "used sometimes", 4 "used often" and 5 "used a great deal"). The 18 scales have been found to provide reliable measures of adolescent coping. In terms of consistency the mean score across the 18 scales is .70, while the mean reliabilty across all scales is .68. These strategies have been represented as the coping styles. In summary coping was assessed by administering the ACS to the 168 students on three occasions over a five year period.

Results

Subjects' data were analysed by first subjecting them to a series of 18 two-way repeated measures ANOVA's in which the students' age during the year of administration and students' sex were the independent variables, and each of the 18 respective strategies were the dependant variables. This analysis was then repeated using the three coping styles as the dependent variables. Table 1 reports the means for the adolescents on the three testing occasions (in 1991, 1993 and 1995).

Insert Table 1

The results indicated that generally young people reported they were coping well and there was little declaration of an inability to cope. The relative usage of all of the 18 coping strategies remained somewhat constant between Year 7 (12 to 13 years) and Year 11 (16 to 17 years). The coping pattern subjects called on most frequently involved a combination of relaxation and working hard to achieve. The next most commonly employed strategies were used on average 'sometimes'. These were, engaging in Physical Recreation, Solving the Problem, Focusing on the Positive, Wishful Thinking, Seeking to Belong, Investing in Close Friends, Seeking Social Support and Worry. Four other strategies were used on limited occasions. These were, Keep to Self, Self-blame, Ignore the Problem, Seek Spiritual Support and Tension Reduction. Only two strategies were hardly ever used. These were, Seeking Professional Help and Social Action.

Table 2 reports the F values for the main effects of year of administration and sex as well as the interaction effect of sex and year for each strategy and style. In addition, it records the F values which reflect the significance of changes in coping between pairs of testing occasions, namely 1991 to 1993, 1993 to 1995 and 1991 to 1995. Finally it reports the means and standard deviations for male and female respondents for each testing occasion.

Insert Table 2

To commence the interpretation of these data it is appropriate to first consider significant interaction effects ($p<.05$), of which there were five. Four of these related to coping strategies, namely, Self-blame, Social Support, Tension Reduction and Not Cope. The fifth significant interaction related to the Non-productive Coping style. As can be seen in Figures 2 to 5, the gap between girls and boys was greater at age 16 than it was at age 12, with girls generally increasing their use of these coping responses at a greater rate than boys. For two of these strategies, Self-blame and Social Support, boys' usage reduced from ages 12 to 14 and then increased approximately to 13 year-old level by the time they were 16.

Insert Figures 2 to 5

Before considering the developmental pattern of students' coping responses, it is worthwhile highlighting one of the most significant findings of the study which relates to the scale on the ACS which measures self-professed inability to cope. The sex-by-age interaction for the Not Cope scale indicated that whereas both boys and girls remained relatively stable in their declared inability to cope between the years spanning 12 to 14, and boys reported much the same low level two years later, girls reported significantly more of an inability to cope by the time they were 16.

Main effects: Age

In total 12 strategies displayed significant change over time. These were Seeking Social Support, Solve Problem, Worry, Work Hard, Not Cope, Tension Reduction, Social Action, Self-blame, Keep to Self, Seek Spiritual Support, Seek Professional Help and Physical Recreation. When these strategies were grouped into styles, two styles, Non-productive Coping and Reference to Others, showed significant change over time.

Of the coping strategies five, (Seeking Social Support, Solving the Problem, Self-blame, Keep to Self and Tension Reduction) remained stable for adolescents between the ages of 12-14 but increased significantly in the next three years. These represent a combination of what may be termed functional and dysfunctional strategies. Clearly it is the last three, Tension Reduction, Self-blame and Keep to Self, which are of the most concern. Two of these five (Self-blame and Social Support) also exhibited significant interaction effects.

Of the remaining strategies for which age showed a significant main effect, three (Social Action, Spiritual Support and Physical Recreation) have a similar pattern of decrease in usage between the ages of 12 and 14, after which the usage remains relatively stable. The final strategy which varies with age was Professional Help. Reference to professionals was significantly less likely to occur when students were 14 years of age than it was when they were 12 and 16.

With regard to the three coping styles two significant age-related differences in patterns were evident. First, students' Reference to Others reduced from age 12 to 14 before increasing back to approximately 12 year old level by age 16. Secondly, whereas boys' use of a coping responses characterised by displacement and avoidance behaviour remained relatively constant throughout their post primary

schooling years, girls increased their usage of avoidance strategies most rapidly between the ages of 14 and 16.

Main effects: sex

The four scales which displayed significant sex effects were Seeking Social Support, Tension Reduction, Ignore and Relax. The first two of these were utilised more by girls (Social Support and Tension Reduction) and the last two (Ignore and Relaxation) were used more by boys. With regard to coping styles, girls showed overall greater likelihood to refer to others and to utilise a Non-productive style of coping. It must be recognised that the latter case is primarily due to sex differences which occur between the ages of 14 and 16.

Discussion

The sex differences in coping noted in this investigation are consistent with earlier findings (Frydenberg & Lewis, 1991, 1993b; Donohue & Gullotta, 1983; Patterson & McCubbin, 1987; Stark et al, 1989; Seiffge-Krenke & Shulman, 1990). Generally girls seek more social support than do boys but are less likely to seek professional advice. In addition, girls, profess less ability to cope and are more likely to utilise strategies such as Tension Reduction, Self-blame and Worry. All of these strategies have been described elsewhere as part of a non-productive coping style (Frydenberg & Lewis, 1991). Boys in contrast are more likely to Seek Relaxing Diversions or Physical Recreation, and to Ignore the Problem and to Keep it to Themselves.

A major finding from the present study, that girls are more likely to tell us that they feel they don't have the strategies to cope, warrants further consideration. Reflection on such a finding could emphasise the boys' greater inclination to 'get on' with life (by relaxing and keeping fit). Alternatively, the fact that boys are more likely to ignore problems and keep problems to themselves may represent denial and that may be at a cost.

Age

In general, age-related effects indicate an increase in a selection of productive and non productive strategies between 14 and 16. At age 14 a number of productive strategies, namely, Social Action, Seek Spiritual Support, Physical Recreation and Seek Professional Help, are used with less frequency. Only Seek Professional Help recovers between 16 and 17 which may be due largely to the dependence of senior secondary students on their teachers.

It is somewhat distressing to note that the most significant age-related findings indicate that older adolescents are more likely to blame themselves for their stresses and to resort to tension reducing strategies. Older adolescents are also less likely to work hard, seek professional advice or utilise spiritual support.

While the findings from this investigation are consistent with earlier cross-sectional findings (Compas, Malcarne, & Fondacaro, 1988; Frydenberg & Lewis, 1993b; Seiffge-Krenke & Shulman, 1990), what this longitudinal study reveals is that there is a different developmental pattern for boys and girls. The gap between females and males generally increases with age, with the older girls appearing to rely more on dysfunctional strategies than do boys. This trend is consistant with the observation that girls more readily declare their inability to cope between years 14 and 16.

The main implication of these findings is that if one were to consider intervening in the education of adolescents and attempt to improve coping behaviour, and more specifically to avert the development of non-productive strategies, it would be advisable to consider both the sex of the students for whom the curriculum is being developed as well as their age. For example, our findings indicate that there appears to be a need to intervene in the education of adolescents at approximately age 14 in order to capture their attention and to capitalise on the particular developmental stage that they are traversing. This is suggested because it can be seen that the greatest shift in coping occurs between the ages of 14 to 16. This shift encompasses both productive and non-productive strategies. However, the finding that overall students profess significantly less ability to cope at 16 than they did at 14 should be seen as a matter of concern. Consequently, it is suggested that Year 9 (14 years) would be the optimum time to engage adolescents in reflection upon their coping behaviour so that consideration is given to the utility of using particular strategies. Such an approach would appear to be particularly relevant for girls, who not only exhibit a greater shift in coping than do boys during the ages of 12 to 16 , but whose ability to cope decreases significantly during this period.

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Figure 1. The Conceptual Areas of Coping

1: **SEEK SOCIAL SUPPORT** is represented by items that indicate an inclination to share the problem with others and enlist support in its management. eg *Talk to other people to help me sort it out*

2: **FOCUS ON SOLVING THE PROBLEM** is a problem-focused strategy that tackles the problem systematically by learning about it and takes into account different points of view or options, e.g., *Work at solving the problem to the best of my ability*

3: **WORK HARD AND ACHIEVE** is a strategy describing commitment, ambition (achieve well) and industry e.g., *Work hard*

4: **WORRY** is characterised by items that indicate a concern about the future in general terms or more specifically concern with happiness in the future. e.g., *Worry about what is happening*

5: **INVEST IN CLOSE FRIENDS** is about engaging in a particular intimate relationship, e.g., *Spend more time with boy/girl friend*

6: **SEEK TO BELONG** indicates a caring and concern for one's relationship with others in general and more specifically concern with what others think, e.g., *Improve my relationship with others*

7: **WISHFUL THINKING** is characterised by items based on hope and anticipation of a positive outcome, e.g., *Hope for the best*

8: **SOCIAL ACTION** is about letting others know what is of concern and enlisting support by writing petitions or organising an activity such as a meeting or a rally, e.g., *Join with people who have the same concern*

9: **TENSION REDUCTION** is characterised by items that reflect an attempt to make oneself feel better by releasing tension, e.g., *Make myself feel better by taking alcohol, cigarettes or other drugs*

10: **NOT COPE** consists of items that reflect the individual's inability to deal with the problem and the development of psychosomatic symptoms, e.g., *I have no way of dealing with the situation*

11: **IGNORE THE PROBLEM** is characterised by items that reflect a conscious blocking out of the problem and resignation coupled with an acceptance that there is no way of dealing with it, e.g., *Ignore the problem*

12: **SELF-BLAME** indicates that an individual sees themselves as responsible for the concern or worry, e.g., *Accept that I am responsible for the problem*

13: **KEEP TO SELF** is characterised by items that reflect the individual's withdrawal from others and wish to keep others from knowing about concerns, e.g., *Keep my feelings to myself*

14: **SEEK SPIRITUAL SUPPORT** is characterised by items that reflect prayer and belief in the assistance of a spiritual leader or Lord, e.g., *Pray for help and guidance so that everything will be all right*

15: **FOCUS ON THE POSITIVE** is represented by items that indicate a positive and cheerful outlook on the current situation. This includes seeing the 'bright side' of circumstances and seeing oneself as fortunate, e.g., *Look on the bright side of things and think of all that is good*

16: **SEEK PROFESSIONAL HELP** denotes the use of a professional adviser, such as a teacher or counsellor, e.g., *Discuss the problem with qualified people*

17: **SEEK RELAXING DIVERSIONS** is about relaxation in general rather than about sport. It is characterised by items that describe leisure activities such as reading and painting, e.g., *Find a way to relax, for example, listen to music, read a book, play a musical* instrument, *watch TV*

18: **PHYSICAL RECREATION** is characterised by items that relate to playing sport and keeping fit, e.g., *Keep fit and healthy*

Table 1: Means and Standard Deviations of coping strategies across three Year levels.

	1991 (Year 7)		1993 (Year 9)		1995 (Year 11)	
Scale	Mean	SD	Mean	SD	Mean	SD
Social Support	2.82	.86	2.80	.85	2.99	.76
Solving Problem	3.21	.67	3.28	.73	3.42	.56
Work Hard	3.83	.61	3.73	.63	3.67	.58
Worry	2.71	.81	2.74	.78	2.90	.71
Friends	2.88	.94	2.95	.93	3.04	.78
Belong	2.93	.75	2.97	.69	2.97	.59
Wishful Thinking	3.13	.77	3.09	.81	3.11	.80
Not Coping	2.00	.61	1.99	.59	2.12	.57
Tension Reduction	1.91	.58	2.04	.69	2.41	.81
Social Action	1.68	.66	1.51	.59	1.55	.51
Ignore the Problem	2.31	.75	2.27	.72	2.38	.69
Self Blame	2.57	.88	2.59	.88	2.82	.80
Keep self	2.64	.84	2.65	.76	2.89	.80
Spiritual Support	2.01	1.05	1.71	1.00	1.67	.95
Focus on Positive	3.13	.76	3.01	.73	2.98	.64
Professional Help	1.56	.63	1.39	.53	1.63	.72
Relaxing Diversions	3.92	.76	3.96	.76	4.00	.65
Physical Recreation	3.44	.77	3.25	.91	3.19	1.02
Non-productive	20.24	3.68	20.36	3.57	21.61	3.65
Productive	26.58	3.82	26.12	3.99	26.15	3.09
Reference to others	8.05	2.25	7.43	1.89	7.87	1.72

Table 2: Adolescent Coping strategies by sex and your level (n = 168)

	Sex x Time		Sex		Time		91				93				95				91/93		93/95		91/95	
							M		F		M		F		M		F							
	F	P	F	P	F	P	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	F	P	F	P	F	P
Soc Sup	4.76	.010	20.0	.000	5.81	.004	2.72	.80	2.92	.91	2.53	.73	3.12	.94	2.77	.68	3.26	.79	.002	.967	10.06	.002	3.88	.050
Solv Pob	2.42	.79	.11	.74	8.78	.000	3.19	.64	3.20	.66	3.28	.76	3.28	.69	3.38	.53	3.44	.58	2.84	.09	6.77	.010	16.99	.000
Worry	.60	.547	.74	.392	4.70	.010	2.69	.80	2.70	.83	2.71	.77	2.78	.77	2.82	.69	2.98	.74	.675	.41	6.10	.014	8.57	.004
Work	1.32	.269	1.08	.299	6.61	.002	3.74	.60	3.91	.60	3.69	.61	3.73	.66	3.64	.57	3.64	.56	5.08	025	1.71	.193	12.99	.000
Friends	.31	.733	.17	.68	2.29	.105	2.86	.871	2.90	1.03	2.90	.94	2.90	.89	2.97	.79	3.01	.81	.08	.78	3.95	.048	3.09	.080
Belong	.168	.845	.21	.64	.58	.56	2.96	.71	2.87	.80	2.93	.70	2.96	.64	2.95	.45	2.91	.65	0.32	.57	0.10	.75	.066	.798
Wishth	1.99	.140	2.45	.12	.00	1.00	3.14	.73	3.11	.79	3.02	.80	3.23	.75	3.00	.73	3.25	.87	.00	.99	.00	.99	.000	.987
Not Cope	6.98	.001	1.50	.222	6.60	.002	2.03	.62	1.97	.61	1.94	.58	1.98	.57	1.98	.54	2.26	.58	.59	.44	12.46	.001	5.38	.021
TensRed	4.04	.019	16.80	.000	42.39	.000	1.84	.54	2.00	.61	1.88	.63	2.22	.68	2.19	.72	2.69	.84	6.93	.009	57.63	.000	74.41	.000
Soc Act	0.56	.570	0.00	.992	7.25	.001	1.66	.59	1.71	.77	1.49	.58	1.51	.59	1.57	.49	1.50	.51	14.09.	.000	0.53	.47	7.07	.009
Ignore	2.06	.130	14.32	.000	1.89	.154	2.51	.74	2.03	.71	2.38	.71	2.14	.74	2.47	.64	2.26	.73	012	.910	3.36	0.69	2.01	.151
Self Bl	6.74	.002	2.43	.121	9.05	.000	2.65	.85	2.48	.92	2.44	.85	2.77	.87	2.69	.74	3.00	.85	0.41	.52	13.49	.000	13.44	.000
Keep Self	1.01	.366	0.58	.45	9.67	.000	2.69	.82	2.56	.87	2.71	.75	2.58	.78	2.88	.81	2.92	.78	0.07	.79	15.33	.000	13.95	.000
Spirit	1.74	.179	0.13	.72	18.41	.000	1.94	1.10	2.08	.96	1.69	1.10	1.75	.86	1.69	1.03	1.63	.82	20.94	.000	1.38	.242	36.24	.000
Foc Pos	1.19	.305	.81	.37	2.89	.059	3.14	.81	3.11	.68	2.92	.75	3.08	.71	2.93	.68	3.03	.62	3.67	.057	0.17	.68	4.96	.027
Prof Help	1.44	.239	.18	.67	14.45	.000	1.61	.66	1.47	.57	1.38	.44	1.36	.52	1.59	.60	1.66	.81	12.46	.001	21.58	.000	1.57	.212
Relax	2.37	.096	4.14	.04	.67	.511	4.06	.74	3.74	.76	3.98	.72	3.89	.80	4.04	.66	3.91	.65	.31	.579	0,56	.46	1.34	.249
PhysRec	1.05	.35	4.03	.046	6.77	.001	3.48	.76	3.37	.80	3.35	.89	3.10	.90	3.33	1.00	3.01	1.04	10.01	.002	0.65	.42	10.94	.001
Non- Prod	4.10	.018	2.47	.118	11.26	.000	20.46	3.31	20.02	4.05	19.91	3.61	20.84	3.53	20.80	3.29	22.42	4.01	0.17	.68	19.05	.000	14.56	.000
Prod. Cope	2.61	.077	.22	.637	1.47	.234	26.80	.350	26.36	4.14	25.67	3.89	26.54	4.08	25.99	2.81	26.31	3.37	2.72	.101	.02	.88	1.73	.191
Ref Others	1.11	.331	2.92	.089	10.27	.000	7.94	.224	8.16	2.26	7.09	2.01	7.76	1.76	7.65	1.71	8.08	1.72	15.82	.35	10.53	.001	1.10	.296

Note: Presented at the Annual Meeting of the American Educational Research Association Conference, Chicago, March 1997. © Frydenberg, & Lewis, 1997.

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Figure 2:
Interaction of Sex and Year for the strategy of Not Coping

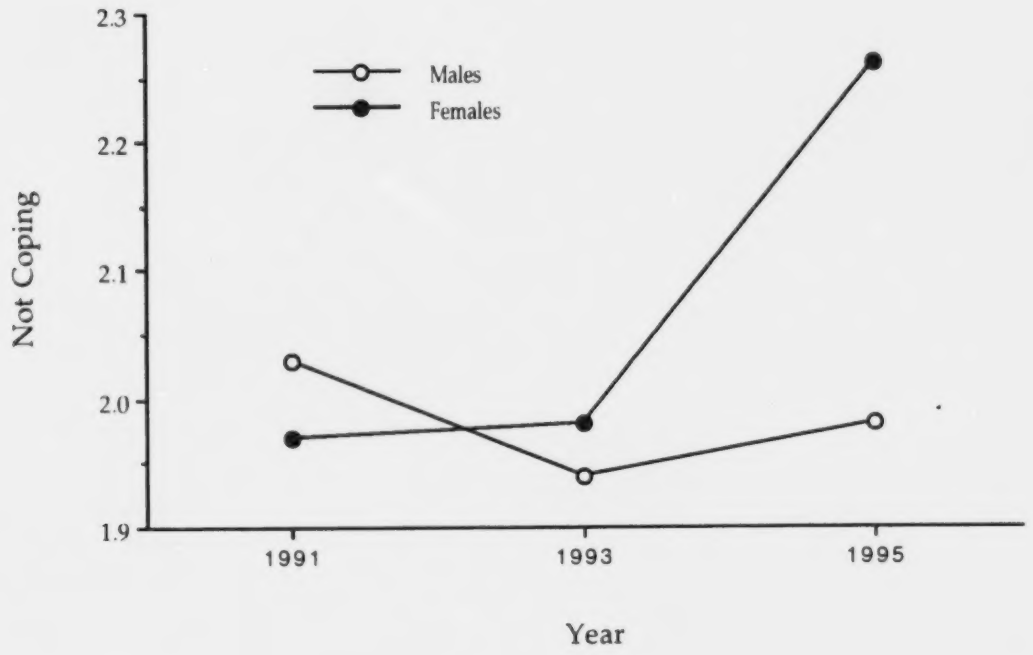

Figure 3:
Interaction of Sex and Year for the strategy of Self-blame

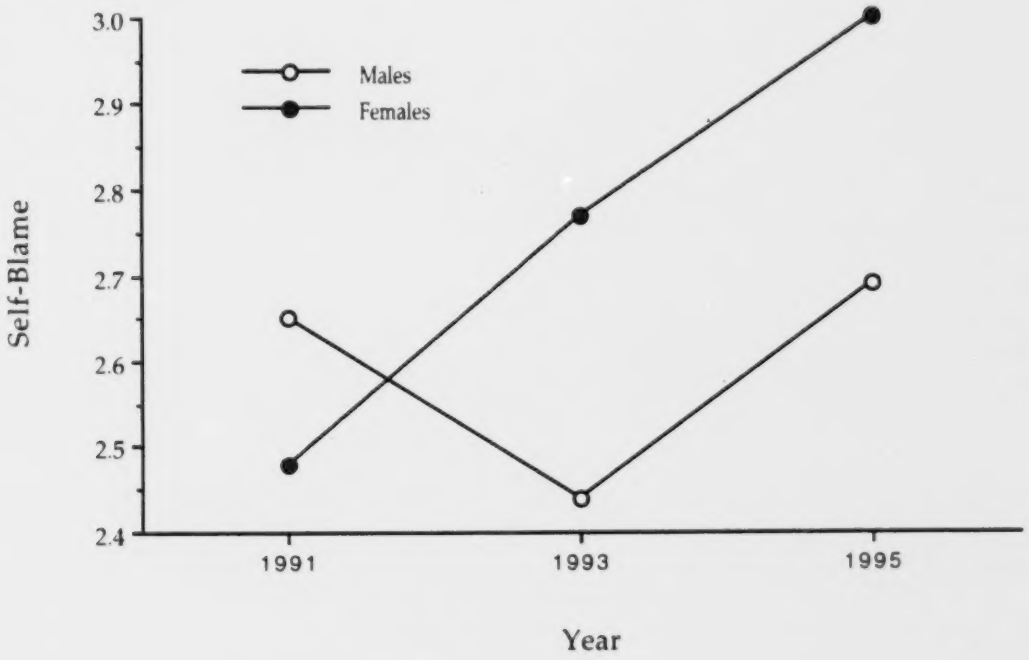

Figure 4:
Interaction of Sex and Year for the strategy of Social Support

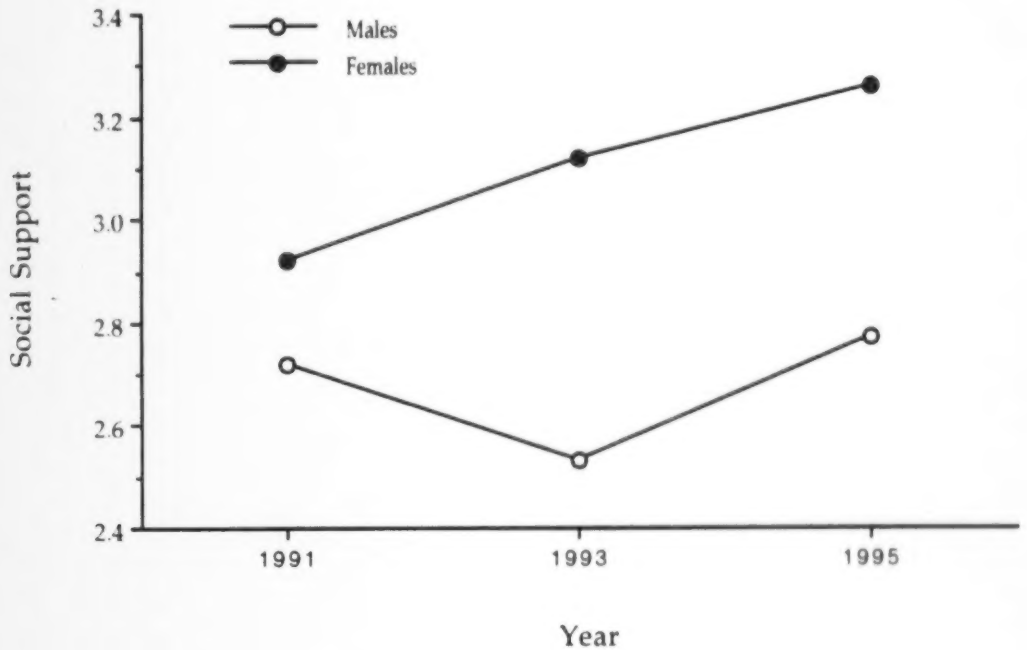

Figure 5:
Interaction of Sex and Year for the strategy of Tension Reduction